

## How to upgrade the Hybrid DVR via serial port commands

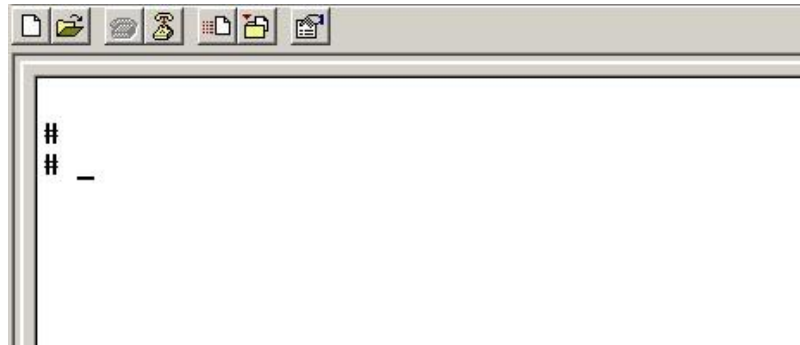
Before go to the upgrade process, you need to get prepare some materials: RS232 cable (which is used to connect DVR with PC or laptop), network cable (with RJ45 terminals). Make sure all the cables are OK and then establish the connection.

Step1: run Hyper Terminal and configure the parameters as following picture:

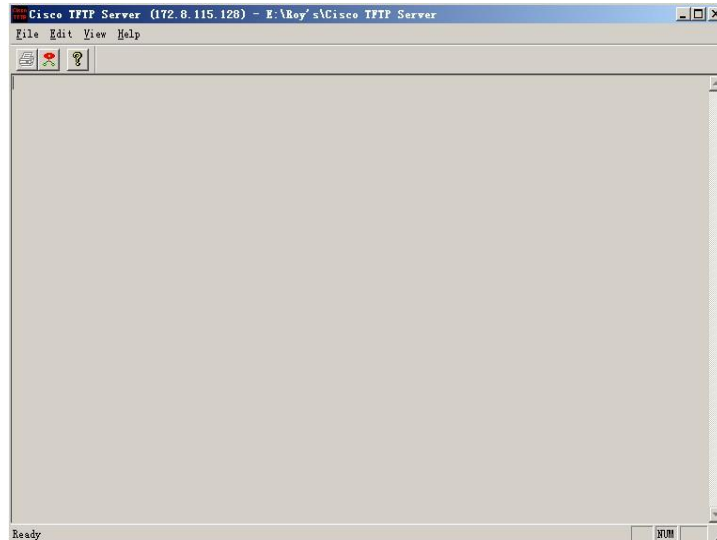


Click "OK" to finish configuration

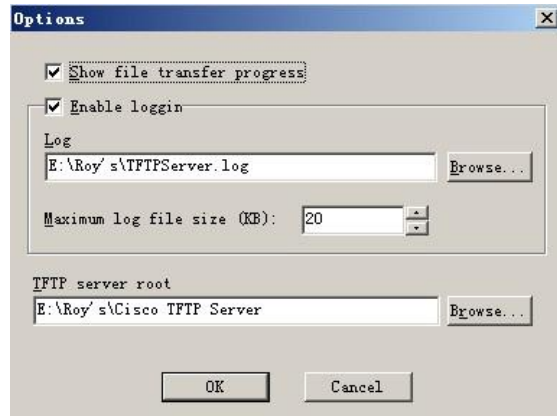
Step2: connect the DVR with PC by serial port cable, then power on the DVR, and type "enter" in the Hyper Terminal interface, you will get "#" string if the connection of RS232 serial port is OK.



Step3: setup the TFTP server. Firstly set the IP address of PC in the same segments as DVR's, for instance, we set IP address of PC as 172.8.115.128, and IP address of DVR as 172.8.115.110. Run the TFTP server will shown as following figure:



Step4: go to “View” option, and select “Options”, you can choose the directory to save the log, please also input the root of TFTP server here.



Step5: put the firmware in the root directory of TFTP server,



Step6: type “reboot” in the Hype terminal interface and press “enter” key, immediately press “U”+ “Ctrl” keys to go to upgrade interface.

```
#
#
# reboot_
```

Step7: for some reasons, sometimes the DVR can not load the system and go to menu interface, so

this step is necessary. Input “f” then press “enter” to confirm, afterwards input “y” to confirm to format the Flash of DVR.

```
Now press [u/U] key to upgrade software: f
Confirm?(y/n): y_
```

Step8: after the format is done, input “U” as the system required, then press “enter”.

```
This program will upgrade software.
*****
* ATTENTION!! PLEASE READ THIS NOTICE CAREFULLY! *
* Don't reset machine,or anything that interrupt it. *
* The upgrade process must finish in 10 minutes! *
* If this program fails,machine might be unusable, *
* and you will need to reflash again. *
* If you find this too risky,power off machine now. *
*****
Now press [u/U] key to upgrade software: u_
```

Step9: you are required to input IP address of device, for instance 172.8.115.110, and then input the IP address of server 172.8.115.128, you need to input “y” to confirm.

```
Now press [u/U] key to upgrade software: u
Checking device file system...
File system error,please upgrade by TFTP

Please input ip address of device: 172.8.115.110
Please input ip address of upgrade server: 172.8.115.128
Confirm?(y/n): y_
```

Step10: DVR now will go to the upgrade process shown as the following figures:

```
Please input ip address of device: 172.8.115.110
Please input ip address of upgrade server: 172.8.115.128
Confirm?(y/n): y
TFTP from server 172.8.115.128; our IP address is 172.8.115.110
Filename 'digicap.mav'.
Load address: 0x400000
Loading: #####
#####
#####_

#####
#####
#####
#####

done
Bytes transferred = 10019148 (98e14c hex)
jffs2: add update file(1024x768.cfg)...(179458B->63784B)done.
jffs2: add update file(720x576.cfg)...(178053B->64120B)done.
jffs2: add update file(app.tar.gz)...(1365987B->1381368B)done.
jffs2: add update file(dsp.bin)...(756332B->588048B)done.
jffs2: add update file(fouricon)...(7150B->7336B)done.
jffs2: add update file(hicore)..._

.....
Protected 122 sectors

Upgrade success!
Press ENTER key to reboot _
```

Step11: press “enter” to reboot the DVR.